

Superseded

Specification (Measurement)

**Transport and Main Roads Specifications
MRS35 Recycled Materials for Pavements**

July 2017

Superseded

Copyright



<http://creativecommons.org/licenses/by/3.0/au/>

© State of Queensland (Department of Transport and Main Roads) 2017

Feedback: Please send your feedback regarding this document to: tmr.techdocs@tmr.qld.gov.au

Contents

- 1 Introduction1**
- 2 Measurement of work1**
 - 2.1 Standard Work Items 1
 - 2.2 Work Operations 2
 - 2.3 Calculations of quantities and basis of payment 3

Superseded

1 Introduction

This Specification gives the requirements for recycled materials to be used in pavements for road construction, rehabilitation or maintenance.

This Specification shall be read in conjunction with MRS01 *Introduction to Specifications*, MRS50 *Specific Quality System Requirements* and other Specifications as appropriate.

This Specification forms part of the Transport and Main Roads Specifications Manual.

2 Measurement of work

2.1 Standard Work Items

In accordance with the provisions of Clause 2 of MRS01 *Introduction to Specifications*, the Standard Work Items covered by this Specification are listed in Table 2.1.

Table 2.1 – Standard Work Items

Standard Item No.	Description	Unit of Measurement
Recycled Materials for Pavements		
42401R	Unbound pavement, Recycled Material Blend Type RM001, [<i>layer location in pavement</i>]	m ³
42402R	Unbound pavement, Recycled Material Blend Type RM002, [<i>layer location in pavement</i>]	m ³
42403R	Unbound pavement, Recycled Material Blend Type RM003, [<i>layer location in pavement</i>]	m ³
42404R	Unbound pavement, Recycled Material Blend Type RM004, [<i>layer location in pavement</i>]	m ³
42405R	Unbound pavement, Recycled Material Blend Type RM005, [<i>layer location in pavement</i>]	m ³
42406R	Unbound pavement, Recycled Material Blend Type RM006, [<i>layer location in pavement</i>]	m ³
42407R	'Category 1' bound pavement material, Bound Recycled Crushed Concrete – Type BRCC1, [<i>layer location in pavement</i>]	m ³
42408R	'Category 2' pavement material, Bound Recycled Crushed Concrete – Type BRCC2, [<i>layer location in pavement</i>]	m ³

The Work Items for supply of stabilising agent, water curing and bituminous curing coats are included in the parent Specification. For example, Work Item 40402 Supply of stabilising agent in MRS08 *Plant Mixed Stabilised Pavements using Cement or Cementitious Blends* covers the supply of stabilising agent for producing Bound Recycled Crushed Concrete (BRCC), when it is used as a replacement for a MRS08 cementitiously stabilised pavement material.

2.2 Work Operations

- Item 42401R Unbound pavement, Recycled Material Blend Type RM001, [layer location in pavement]
- Item 42402R Unbound pavement, Recycled Material Blend Type RM002, [layer location in pavement]
- Item 42403R Unbound pavement, Recycled Material Blend Type RM003, [layer location in pavement]
- Item 42404R Unbound pavement, Recycled Material Blend Type RM004, [layer location in pavement]
- Item 42405R Unbound pavement, Recycled Material Blend Type RM005, [layer location in pavement]
- Item 42406R Unbound pavement, Recycled Material Blend Type RM006, [layer location in pavement]

Work Operations incorporated in the above items include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*
- b) winning/reclaiming and processing of feed materials to produce conforming, uniform and homogenous product materials
- c) stockpiling
- d) supply and delivery of all material to the pavement
- e) spreading/paving of material in a way that ensures that there is no segregation of it
- f) supply and incorporation of water
- g) compacting and trimming
- h) additional work to achieve higher tolerances
- i) maintenance of the subgrade and/or pavement courses, and
- j) all testing, including compliance testing and testing for reporting only.

Item 42407R 'Category 1' bound pavement material, Bound Recycled Crushed Concrete – Type BRCC1, [layer location in pavement]

Item 42408R 'Category 2' bound pavement material, Bound Recycled Crushed Concrete – Type BRCC2, [layer location in pavement]

Work Operations incorporated in the above items include:

- a) Work Operations listed in Clause 2.1.5 of MRS01 *Introduction to Specifications*, and
- b) Work Operations listed in Clause 2.1.1 of MRS08 *Plant-Mixed Stabilised Pavements using Cement or Cementitious Blends*.

2.3 Calculations of quantities and basis of payment

Payment is based on finished compacted volume in the pavement and as follows:

- a) For unbound pavement layers constructed using recycled material blends, as per Clauses 3 and 4 of MRS05 *Unbound Pavements*, and
- b) For stabilised pavement layers constructed using bound recycled crushed concrete, as per Clauses 2.3 to 2.6 of MRS08 *Plant-Mixed Stabilised Pavements using Cement or Cementitious Blends*.

Superseded

Superseded